

Title (en)

ELECTRIC LINEAR ACTUATOR AND ELECTRIC BRAKE DEVICE

Title (de)

ELEKTRISCHES LINEARES STELLGLIED UND ELEKTRISCHE BREMSVORRICHTUNG

Title (fr)

ACTIONNEUR LINÉAIRE ÉLECTRIQUE ET DISPOSITIF DE FREINAGE ÉLECTRIQUE

Publication

EP 3576294 A4 20201014 (EN)

Application

EP 18744948 A 20180122

Priority

- JP 2017011873 A 20170126
- JP 2018001709 W 20180122

Abstract (en)

[origin: EP3576294A1] Provided is an electric linear motion actuator that enables size reduction and cost reduction while increasing the instantaneous output of an electric motor. A control device (2) of the electric linear motion actuator includes: a motor driver (24) configured to control power supplied to a coil (4b) of an electric motor (4); a power storage unit (21) connected to a power supply device (3) and the motor driver (24); a current flow direction restriction unit (20) disposed between the power supply device (3) and the power storage unit (21), which causes current to pass only in a direction in which power is supplied from the power supply device (3); and a step-up unit (19) configured to step up voltage of the power supply device (3) and provide the stepped-up voltage to the power storage unit (21).

IPC 8 full level

H02P 15/00 (2006.01); **B60T 8/32** (2006.01); **B60T 13/74** (2006.01); **H02P 27/04** (2016.01); **F16D 66/00** (2006.01); **F16D 121/24** (2012.01)

CPC (source: EP US)

B60T 8/32 (2013.01 - EP); **B60T 13/741** (2013.01 - EP); **F16D 65/18** (2013.01 - US); **H02K 7/06** (2013.01 - US); **H02K 7/102** (2013.01 - US); **H02P 15/00** (2013.01 - EP); **H02P 27/04** (2013.01 - EP); **F16D 2066/005** (2013.01 - EP); **F16D 2121/24** (2013.01 - EP US); **H02P 2201/07** (2013.01 - US); **H02P 2201/09** (2013.01 - EP US)

Citation (search report)

- [XY] JP 2001280384 A 20011010 - TOKICO LTD
- [XY] US 2015042255 A1 20150212 - RIED DAVID L [US]
- [Y] EP 2066003 A2 20090603 - TOYOTA JIDOSHOKKI KK [JP]
- [A] JP 2007151247 A 20070614 - TOYOTA MOTOR CORP
- See also references of WO 2018139387A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3576294 A1 20191204; **EP 3576294 A4 20201014**; **EP 3576294 B1 20240710**; CN 110249522 A 20190917; CN 110249522 B 20230512; JP 2018121461 A 20180802; US 11441626 B2 20220913; US 2019338817 A1 20191107; WO 2018139387 A1 20180802

DOCDB simple family (application)

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